

>
> From: Shelley, Gerald
> Sen'
> To:
> Cc: Dovey, Steve
> Subject: RE: Electronic version of Monday's docs
>
> John
>
> See my other Email.
>
> This is the initial current limit where the controller is applying the
> maximum voltage it can without exceeding the set current limit. As the
> pressure / flow comes down, the resistance reduces, so the controller is
> increasing the voltage and hence the piston travel until a knock is
> detected at around 10s.
>
> Gerald
>
> -----Original Message-----
> From:
> Sent: 4
> To: Shelley, Gerald
> Cc: Dovey, Steve
> Subject: FW: Electronic version of Monday's docs
>
> Gerald,
>
> Does the first paragraph make any sense to you ? We ran a pump here
> yesterday afternoon with the latest controller and it didn't exhibit this
> condition. All we noticed was a build up of drive level (170 - 180 - 190
> etc..) over the first ten seconds or so.
>
> John
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>
>
> -----
> From:
> Sent:
> To:
> Cc: Shelley, Gerald; Dovey, Steve;
> Subject: RE: Electronic version of Monday's docs
>
> John
>
> The pump runs for less than a second, stops, runs again, stops, and
> repeats this cycle a few times and then runs normally. It does not matter
> whether the pump is started with the manifold at atmosphere or vacuum. I
> have asked Carolyn to record the sound of this start up condition and send
> it over to you guys as a sound file. I will also try and get in and have
> a look at the pump. I might not manage this until after the. because
> I am in Wilmington next week. Nothing was said about magnetic fields, or
> vibration. It is assumed we will do what ever it takes to produce a pump
> with zero vibration. They also expect us to produce a quiet pump, or at
> least as quiet as an
>
> When we met in you asked me a few questions and I finally have

> some answers.
> 1) ~ would prefer the controller to be integrated into the pump
> assembly.
> 2) There will be cooling available for the pump, however they want it to
> be able run at standard lab ambient (up to 35C). The prototypes must be
> self sufficient; a fan attached to and controlled by the pump will be OK.
> The point is they don't want to have to worry about rigging up a fan.
> 3) If the turbo and shuttle combination is as reliable as a turbo and
> rotary pump they will want to buy the combination as a turbo rig.

> So what do you think?

> Regards

> Carl

> -----Original Message-----

> From:

> Sent:

> To:

> Cc: Snelley, Gerald; Dovey, Steve

> Subject: RE: Electronic version of Monday's docs

> Carl,

> Do you know what is actually meant by "fires". We can't recollect
> noticing this condition when we initially ran the pump.

> Was any mention made of the vibration and the level of the magnetic
> field ?

> Regards,

> John

> -----
> From:

> Sent:

> To:

> Subject: FW: Electronic version of Monday's docs

> <<File: shuttle1.xls>><<File: shuttle1.doc>>

> -----Original Message-----

> From:

> [mailto:

> Sent:

> To:

> Cc:

> Subject: Electronic version of Monday's docs

> Per your request, attached are two files. One is the
> Word doc, the
> other is an updated Excel doc much like the one
> presented on Monday.
> Please forward appropriately to England. Thanks and
> see you tomorrow.

> CB

> and here it is forwarded appropriately. If I have missed
> anyone out please forward it to them.

>
> John: One of the items raised in Carolyn's report is the
> start mode of the shuttle pump. She wants to know if this is normal. "At
> turn on, the pump intermittently fires several times before settling into
> a stable pump down mode. This unexpected behavior was of concern at
> first. However, the pump quickly stabilizes at .65-.9 amps independent of
> flow rate up to the maximum tested flow of 7 sccm helium." Can you give
> me an answer by 1:00 p.m. GMT tomorrow afternoon as I will be on the road
> by 1:30 and would like to take the information with me. Please copy
with the answer.

> Gerald: It looks like prefer the new IDC mounted inside
> the turbo. One condition though, it must not have large military style
> connectors.

>
> That's all for now.

>
> Carl
>
>